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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,390	09/10/2001	Joar Vaage	1781	3776
24264	7590	08/05/2005	EXAMINER	
TIMOTHY J MARTIN, PC 9250 W 5TH AVENUE SUITE 200 LAKEWOOD, CO 80226			CHANG, AUDREY Y	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No.	Applicant(s)	
	09/936,390	VAAGE, JOAR	
	Examiner	Art Unit	
	Audrey Y. Chang	2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-41 is/are pending in the application.
- 4a) Of the above claim(s) 14, 20-24 and 29-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13, 15-19 and 25-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remark

- This Office Action is in response to applicant's amendment filed on June 2, 2005, which has been entered into the file.
- By this amendment, the applicant has canceled claims 1-12 and has newly added claims 13-41.

Election/Restrictions

1. **Newly submitted claims 14, 20-24 and 29-41 are directed** to an invention that is independent or distinct from the invention originally claimed for the following reasons:
2. This application contains claims directed to the following patentably distinct species of the claimed invention:

Species A: a method for stereo projection of picture with *incoming* picture signal alternating cyclically between picture intended for left eye and picture intended for right eye, wherein the pictures are decoded and stored in first and second picture storages and is *scanned periodically* and projected by first and second projectors, (claims 13, 15-18 and 19),

Species B: a method for stereo projection of picture wherein the first and second picture storages are organized with *picture storage areas* which is periodically and *alternatively* scanned, (claims 14, 20-21 with 13 and 19),

Species C: a method for stereo projection of picture using picture generators, decoders and picture selectors controlled by control signal, (claims 22-24, with 19),

Species D: a device for stereo projection of pictures representing by an *incoming* picture signal having a page selector and a control unit to transmit odd numbered picture to first projector and even numbered picture signals to second projector, (claims 25-28),

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Species E: a device for stereo projection of picture representing by an incoming picture signal having decoders between the page selectors and the projectors and picture storages coupled to the detectors wherein the picture storages comprise a plurality of picture storage areas, and picture generators, (claims 29 and 31-32 with claim 25),

Species F: a device for stereo picture projection that further comprises a first and second area selector connected to the first and second decoders and first and second picture storages, (claim 30 with claim 25),

Species G: a device for stereo projection of picture device representing by an *incoming* picture signal having a page selector and a control unit to transmit odd numbered picture to first projector and even number to second projector, and the odd number pictures not received by the second projector and the even number picture not received by the first projector, (certain means has to be include to achieve such), (claims 33-36,),

Species H: a device for stereo projection of picture device representing by an *incoming* picture signal having a page selector and a control unit to transmit odd numbered picture to first projector and even number to second projector, and the odd number pictures not received by the second projector and the even number picture not received by the first projector, and further include picture selectors, decoder and page selector, (claims 37-39 with claim 33),

Species I: a device for stereo projector of pictures having a area selector adapted to a common picture storage, a left and right projectors, right and left picture selectors and controller, (claims 40-41).

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Currently, no claims are generic to all of the species.

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Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits.

Accordingly, claims 14, 20-24 and 29-41 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claims 13, 15-18, 19 and 25-28 remain pending in this application.

Response to Amendment

3. The declaration under 37 CFR 1.132 filed June 2, 2005 is sufficient to overcome the rejection of claims 1-12 based upon the US patent issued to Oba et al (PN. 5,959,663).

Claim Objections

4. **Claims 13, 15-19 and 25-27 are objected to because of the following informalities:**

(1) It is not clear if it is the "picture" or the "picture signal" being projected by the projector, since claims 13 and 25 specifically recite that the "picture" is received and transmitted to the projector not the "picture signal". It is not clear if the applicant means to have these two terms means two different things or not. Clarifications are required. The terms have to be consistent through out all the independent claims as well as dependent claims to avoid confusions.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 13, and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the patent issued to Park (PN. 6,522,351) in view of the patent issued to Lipton et al (PN. 5,416,510).**

The newly submitted claim 13 specifically recites the features having *incoming* picture signal alternatively cyclically between a picture intended for the right eye and a picture intended for the left eye, which is different from the originally submitted claims 1-2, which *necessitates* the new grounds of rejections.

Park teaches a method and device for stereo projection of pictures of an object (10, Figures 2-4), wherein picture signals of the object that are intended for left eye and for right eye respectively are formed and received by left and right video cameras and left and right receiving sections (100, and 110). Park teaches that the left eye and right picture signals from the cameras are converted to left eye and right eye television image signals, (such as 402 and 404 in Figure 5), and the left and right receiving sections *converts* the left and right television signals to left eye and right eye image signals, which means some sort of "decoding" function is performed. It is also implicitly true that certain picture storages for the left and right eye image signals are needed for storing the left eye and right eye image signals such that *repeated scanning* or periodical scanning the storages with the left and right eye image signals is performed, (double scanning sections 122 and 124, or 212 and 214 or 312 and 314, in Figures 2-4), to generate the double scanned image signals which are consequently transmitted to the projector for projection.

This reference has met all the limitations of the claims with the exception that it does not teach explicitly that the incoming left and right eye pictures are formed in cyclically format with odd and even number pictures and with odd numbered pictures being transmitted to a first projector and the even numbered pictures being transmitted to a second projector. However Park does teach explicitly that the left eye picture and the right eye pictures are *separated* stored, decoded and scanned, whether to make them coming in cyclical form or not does not differentiate the method of projection of the left and right

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eye pictures to produce stereoscopic image of the object. One skilled in the art certainly can make the cameras (102 and 104) take the left eye and right eye pictures of the object in time sequential manner in order for the odd numbers of the pictures representing left eye picture and even number of the pictures representing right eye picture for the benefit of reducing the number of the incoming pictures needed for achieving the projection. Park teaches that the left and right images are alternatively transmitted (130, Figure 2) to the projection device, but it does not teach explicitly in this embodiment to use two projectors one for projecting the left eye picture image signals one for projecting right eye picture image signals. Park however teaches it is known in the art to use two projectors for such stereo picture projection, (please see Figure 1). **Lipton** et al in the same field of endeavor teaches explicitly that left eye and right eye pictures of an object obtained by a pair of cameras (120 and 121, Figure 1C) can be transmitted to right and left projectors (404 and 403, Figure 4) respectively via recorder and display controller to make the right pictures being projected by the right projector and the left pictures being projected by the left projector for the benefit of using a pair of projectors that allows simultaneous projections of the left and right eye pictures without time delay.

With regard to claim 17, the left double scanning section and the right double scanning section taught by Park serve as the first and second picture generator. With regard to claim 18, the *double* scanning section allows scanning of the image signals at a rate *different* from the incoming rate of the incoming picture signal.

7. Claims 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over the patent issued to Lipton.

The newly submitted claim 25 specifically recites the features having *incoming* picture signal alternatively cyclically between a picture intended for the right eye and a picture intended for the left eye,

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which is different from the originally submitted claims 1-2, which *necessitates* the new grounds of rejections.

Lipton et al teaches a *device for stereo projection of pictures* having a pair of cameras (120 and 121, Figure 1C) for *producing left eye picture* intended for left eye and *right eye picture* intended for right eye and the device further comprises recorder and display *controller* (401 and 402, Figure 4) for *selecting* the left eye picture signal and directs it via a *first optical path* to a *left projector* and for selecting the right eye picture signal and directs it via a *second optical path* to a *right projector* for stereoscopic projection. This implies that display controller must include certain page selector for selecting the left eye and right eye picture signals from the recorder.

This reference has met all the limitations of the claims. It however does not teach explicitly that the page selector has a control unit adapted to sense the incoming left and right picture signals. But such control unit is either implicitly included for making the right eye and left eye picture signal *properly* being selected and directed to the respective projectors respectively or it is an obvious modification to one skilled in the art to *ensure* the selection and the transmission of the picture signals to the proper projectors be proper for achieving the stereoscopic image display.

This reference also does not teach explicitly that the left eye and right eye picture signals are cyclically presented with odd numbered image signals and even numbered image signals being transmitted to the first and second projectors respectively. However Lipton does teach explicitly that the left eye picture signals and the right eye picture signals are transmitted to left and right projectors respectively whether to have them coming in alternative or cyclic format or not does not differentiate the projection.

With regard to claim 26, the left and right eye picture signals are projected at the same time.

With regard to claim 28, it is implicitly true or obvious modification to one skilled in the art to include certain decoders in the display controller so that the multiplexed left eye and right eye picture

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signals be demultiplexed, selected and properly formatted so that picture signals are transmitted and properly displayed on the projectors.

Response to Arguments

8. Applicant's arguments with respect to original but canceled claims 1-12 have been considered but are moot in view of the new ground(s) of rejection. The newly submitted claims have been fully considered and they are rejected for the reasons stated above.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

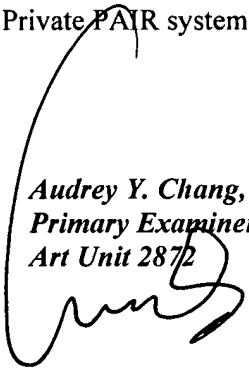
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Audrey Y. Chang whose telephone number is 571-272-2309. The examiner can normally be reached on Monday-Friday (8:00-4:30), alternative Mondays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Audrey Y. Chang, Ph.D.
Primary Examiner
Art Unit 2872



A. Chang, Ph.D.